## CONVERTING PERCENTS TO DECIMALS AND DECIMALS TO PERCENTS

## Convert to a decimal.

1. $75 \%$
2. $7 \%$
3. $93 \%$
4. $105 \%$
5. $3 \%$
6. $18 \%$
7. $64 \%$
8. $240 \%$
9. $43 \%$
10. $22 \%$
11. $50 \%$
12. $3 \%$
13. $377 \%$
14. $59 \%$
15. $8 \%$
16. 119\%
17. $71 \%$
18. $1 \%$
19. $22 \%$
20. $52 \%$

## Convert to a percent.

21. 0.9 ..... 22. 0.7223. 0.4124. 0.21925. 0.826. 0.2827. 0.63328. 0.5
22. 0.35
23. 0.877
24. 1.75
25. 31.46
26. 0.83
27. 1.6
28. 0.3
29. 0.84

## CONVERTING FRACTIONS TO PERCENTS AND PERCENTS TO

 FRACTIONS
## Converting each fraction into a percent.

1. $\frac{2}{5}$
2. $\frac{7}{8}$
3. $\frac{5}{16}$
4. $\frac{1}{8}$
5. $\frac{3}{4}$
6. $\frac{17}{50}$
7. $\frac{3}{10}$
8. $\frac{3}{100}$
9. $\frac{3}{16}$
10. $\frac{5}{8}$
11. $\frac{4}{5}$
12. $\frac{1}{4}$
13. $\frac{3}{5}$
14. $\frac{9}{10}$
15. $\frac{47}{100}$
16. $\frac{17}{50}$
17. $\frac{1}{2}$
18. $\frac{1}{16}$
19. $\frac{7}{10}$
20. $\frac{89}{100}$

## Convert each percent to a fraction.

21. $75 \%$
22. $80 \%$
23. $12 \%$
24. $88 \%$
25. $49 \%$
26. $50 \%$
27. $25 \%$
28. $10 \%$
29. $74 \%$
30. $55 \%$
31. $94 \%$
32. $5 \%$
33. $2 \%$
34. 16\%
35. $28 \%$
36. $62 \%$
37. $95 \%$
38. 65\%
39. $77 \%$
40. 100\%

## FINDING PERCENTS IN STORY PROBLEMS

## Solve. Round to the nearest percent.

1. A writer earns $\$ 3400$ a month. Last month she spent $\$ 204$ on food. What percent of her income was spent on food?
2. On the average, 7 people out of 28 ride the bus to work. What percent do not ride the bus to work?
3. Last season a baseball player hit 48 home runs. So far this season he hit 30 home runs. The number of home runs he has hit so far this season is what percent of the number of home runs he hit last season?
4. A survey showed that hamburgers are preferred to hot dogs 5 to 3 . What percent of those surveyed prefer hamburgers?
5. In April, 175 cases of toy cars were sold. In May, 125 cases were sold April's sales were what percent of May's sales?
6. Robert sold 20 cups of lemonade and 40 cups ice tea at the FFA stand at the county fair. What percent of the drinks sold were lemonade?
7. The down payment on a bike is $\$ 15$. The bike costs $\$ 75$. The down payment is what percent of the cost?
8. At EHS, for every 6 students who like rap music, 14 do not. What percent of the students like rap?
9. Steve weighs 120 pounds and his dad weighs 180 pounds. Steve's weight is what percent of his dad's weight?
10. The ratio of red marbles to blue marbles in a jar of marbles is 8 to 3 What percent of the marbles are red?
11. During basketball practice, Lee attempted 30 free throws and made 22. What percent of these free throw attempts did he make?
12. On a spelling test, Michelle spelled 17 words correctly. There were 20 words on the test. What percent of the words did she spell correctly?

## FINDING THE PERCENTAGE IN A WORD PROBLEM

## Read carefully and solve.

1. Seventy-five percent of Mr. Whipple's customer prefer Charmin toilet paper. There were 280 customers in his store today. How many prefer Charmin?
2. There are 850 students at Altamont Junior High School. Of these, 36\% are in the eighth grade. How many students are in the eighth grade?
3. Fifteen percent of the cassette tapes delivered to the J-Mart were new releases. How many new releases were there out of the 360 cassette tapes?
4. The mailman delivered mail to $95 \%$ of the 180 houses on Grove Avenue. He delivered mail to how many houses on Grove Avenue?
5. Out of 5,500 people who attended the football game, fifty-six percent were rooting for the home team. How many people rooted for the home team?
6. The enrollment at St. Mary's School is $110 \%$ of last year's enrollment. The enrollment last year was 390 students. What is the enrollment this year?
7. Mr. Wilson sold merchandise to $25 \%$ of the clients he contacted. If he contacted 168 clients, how many did he sale merchandise to?
8. The Coffee Hut sold 175 pounds of coffee on Monday. Vanilla nut flavor coffee made up fifty-six percent of the coffee sold. How many pounds of vanilla nut coffee were sold Monday?
9. Out of the country's 5.9 million population, $12 \%$ will pay no income tax. How many will not pay income tax?
10. Harriet's Beauty Salon gives perms to $40 \%$ of her customers every Friday. If there are fifty-five customers on Friday, how many received perms?

# FINDING THE BASE NUMBER OF A PERCENT STORY PROBLEM 

## Read carefully and solve.

1. Mr. Ash owns a tree, which is 42 feet tall. He estimates that this tree is $75 \%$ as tall now as it will be when fully grown. How tall will the tree be when it is fully grown?
2. Doris has read 120 pages of a library book. This is $30 \%$ of the book. How many pages are there in the book?
3. There are 45 boys on the school football team. This number represents $5 \%$ of the school's total enrollment. What is the school's total enrollment?
4. A job is $331 / 3 \%$ completed in 15 minutes. At this rate, how many minutes will it take to complete the entire job?
5. Phyllis sold $85 \%$ of the store's pair of sunglasses on Friday. If she sold 51 pairs of sunglasses Friday, how many pairs did the store originally have in stock?
6. Martha received 212 votes for class secretary. This was $53 \%$ of the total number of votes cast. How many votes were cast?
7. Arlene has earned $75 \%$ of the points she needs for a prize. She has earned 660 points. How many points are needed to win the prize?
8. Jake can throw a baseball 240 feet. This is $80 \%$ as far as his older brother can throw the ball. How far can his older brother throw the ball?
9. Suzy determined that $7 \%$ of all her earnings went to entertainment. If she spent $\$ 111.72$ on entertainment, how much was her total earnings?
10. Glenn saved $62 \%$ of the money necessary for his vacation by April. If he had saved $\$ 3100$, how much is his vacation going to cost?

## COMMISSION AND TIPS

## Read carefully and solve.

1. Mary sold $\$ 192$ worth of greeting cards. If she received $25 \%$ commission on all sales, how much commission did she receive?
2. A saleswoman's wages consist of $\$ 80$ per week and $5 \%$ commission. If her weekly sales amount was $\$ 1650$, find her total weekly wages?
3. Mr. Bannon sells roses at a commission rate of $20 \%$. What is his commission for selling 240 dozen roses, priced at $\$ 15.50$ a dozen?
4. A shirt salesman receives $12.5 \%$ commission. How much does he earn for 12 dozen shirts priced at $\$ 8.75$ each?
5. Mr. Cunningham received $\$ 360$ commission for the sale of a boat. This was a rate of $10 \%$. Find the price of the boat.
6. Leo's total bill at the Blue Lobster came to $\$ 45.90$. He wanted to leave a $20 \%$ tip. How much money would he need to leave for the tip?
7. After finishing his meal at the Silver Rush restaurant, Kevin was given a bill for $\$ 8.75$. He wanted to leave a $16 \%$ tip for his waitress. How much will the tip need to be?
8. Smitty won a jackpot of $\$ 7500$ at the new casino. He decided to give the change girl a tip of $5 \%$ of his jackpot. How much money did Smitty tip the change girl?
9. Al Bundy finally had a great day at the shoe store. He sold so many pairs of shoes that the store profited $\$ 4000$ in one day. Gary, his boss, decided to reward Al by giving him a tip of $8 \%$ of the day's profits. How much money did Al receive as a tip?
10. The bill for Moe's Drive-in came to $\$ 18.50$. How much money should be left as a tip if it is to be $18 \%$ of the bill?

## DISCOUNT PROBLEMS

## Solve. Round off money answers to the nearest penny.

1. O-Kay Records is offering a $40 \%$ discount on all sheet music purchased on Saturday. How much will Jay save if he buys sheet music on Saturday regularly priced at $\$ 45$ ?
2. The regular price for an oil change is $\$ 23.50$ at Quickie-Lube. This week, Quickie-Lube is offering a $30 \%$ discount. How much is the discount on an oil lube?
3. Caroline purchases a purse regularly priced at $\$ 35.90$ during a $20 \%$ off sale. How much did she save?
4. During the $35 \%$ off sale, Mr. Hansen purchased a suit. The suit normally sells for $\$ 120$. How much money did he save by purchasing it on sale?
5. The printer that Micki needs for her computer is regularly priced at $\$ 159.85$. If she waits until the big $60 \%$ off sale, how much will she save?
6. How much is the discount on a $\$ 450$ television marked at $15 \%$ off?
7. The Sofa-R-Us store is advertising a $30 \%$ discount rate on all sofas this Friday. How much will Wesley save on a $\$ 2499$ sofa sleeper by purchasing it this Friday?
8. Lauren bought $\$ 5.90$ of fake fingernails that were on sale for $25 \%$ off. What was her savings on the fingernails?
9. Find the sale price on a $\$ 895$ car stereo that is marked $20 \%$ off?
10. During a sale, ladies' coats are selling for $75 \%$ of the original price. The original price was $\$ 98$. What is the price of the coats?
11. Curtis bought a package of fireworks that normally costs $\$ 59$. Since he bought it on July $3^{\text {rd }}$, he received a $75 \%$ discount. What was the sales price?
12. Sammy bought a juicer that regularly costs $\$ 75$ on sale for $15 \%$ off. What was the juicer's sale price?
13. Archie bought an engagement ring for Betty. The ring usually sells for $\$ 5500$ but is on sale for $15 \%$ off. What is the ring's sale price?
14. Morgan told Brittany that she was going to the big sale at Jansen's department store to buy a suit that will be on sale for $40 \%$ off its regular $\$ 245$ price. What will be the sale price of the suit?
15. A football with a catalog price of $\$ 25$ sold for $\$ 21$. Find the percent of discount?
16. Angela bought a $\$ 550$ set of speakers for $\$ 440$. What was the percent of discount?
17. The end of the summer sale at Harvey's Toy Palace indicated that toys would be marked down $10 \%-40 \%$. Wally bought a $\$ 190$ train set for $\$ 166.25$. What was his percent of discount?
18. Bob Cobb bought a conductor's baton for $\$ 22.50$. It regularly costs $\$ 30$. What was the discount rate?
19. Devon purchased a $\$ 350$ VCR for $\$ 297.50$. What was his percent of discount?
20. Tara bought a make-up kit at Mervyn's for $\$ 75$. It regularly cost $\$ 90$. What was the discount rate?

## SALES TAX AND TOTAL COST

## Read carefully and solve.

1. The price of a stereo system is $\$ 627.50$. The sales tax is $6 \%$. Find the amount of the tax and the total cost.
2. The price of a small sailboat is $\$ 4450$. The sales tax is $5 \%$. Find the total cost.
3. A pair of basketball sneakers costs $\$ 24.95$. The sales tax is $8 \%$. Find the total cost.
4. A new ten speed bicycle costs $\$ 149.95$. In Andrea's state the sales tax is $4 \%$. In Donna's state tax is $7 \%$. How much more would Donna pay in tax to buy the bicycle?
5. A record album costs $\$ 8.98$. The sales tax is $8 \%$. Find the total cost.
6. Jim buys $\$ 885.75$ worth of furniture at a $10 \%$ discount. The sales tax is $7 \%$. What is his total bill?
7. A state has a sales tax of $7 \%$. The Jarretts live in a city that has an additional sales tax of $2 \%$. The Jarretts want to buy a boat that sells for $\$ 5384.30$. They have $\$ 5900$. Do they have enough money to buy the boat?
8. The price of a shirt is $\$ 16.95$. The sales tax is $5 \%$. What is the total cost?
9. Barry bought a new guitar that costs $\$ 295$. He paid $5 \%$ sales tax. What was his total cost?
10. Habib purchased a toaster for $\$ 24.99$, a microwave oven for $\$ 149.95$, and a blender for $\$ 50$. The sales tax rate is $7 \%$. What was his total cost?

## SIMPLE INTEREST

## Use the formula I = PRT to work the following problems.

1. Benny borrowed $\$ 4000$ from credit union to buy a used car. He was charged $9 \%$ simple interest for 3 years. How much interest did he pay?
2. Chuck invested $\$ 9000$ in a special savings account that earned $5 \%$ simple interest. If he left the money in the account for 4 years, how much interest did he earn?
3. Mr. Franklin borrowed $\$ 800$ for a period of two years. He is to pay simple interest at a rate of $17 \%$. How much interest will he have to pay?
4. Mrs. Mayer borrowed $\$ 700$ for six months. How much simple interest will she be charged if the interest rate is $14 \%$ a year?
5. Gillian invested $\$ 15,000$ in a Palm Tree Company that promised to earn him $8 \%$ simple interest for 3 years. How much interest did he earn?
6. Ted started a savings account by putting in $\$ 500$. The account earned $3 \%$ simple interest. How much interest did Ted make after 4 years?
7. Mr. Walker borrowed $\$ 800$ for $21 / 2$ years. He is to pay $8 \%$ annual interest. How much interest is he to pay?
8. Danni has $\$ 3500$ in a savings account for 30 months. Interest was paid at an annual rate of $5 \%$. How much interest did she receive?
9. Henry deposited $\$ 900$ in a savings account at $6.5 \%$ interest. How much interest will Henry receive in one year?
10. Venus borrowed $\$ 14,500$ to buy a new car. The interest rate was $12.5 \%$. If the loan was for 5 years, how much interest did Venus have to pay?
11. Judy borrowed $\$ 700$ for one year. She will pay $8 \%$ interest on the first $\$ 300$ and $6 \%$ interest on the remainder of the loan. How much interest will she pay?
12. Mrs. Vernon paid $\$ 48$ interest for a two year loan at $6 \%$ annual interest. How much money did she borrow?
13. Marvin paid $\$ 42$ interest for a $\$ 350$ loan for $11 / 2$ years. What was the rate of interest?
14. How much must be deposited at $41 / 2 \%$ annual interest in order to earn $\$ 36$ in two years?
15. James borrowed $\$ 700$ for one year. Interest on the first $\$ 300$ of the loan was $8 \%$ and the interest on the remainder of the loan was $6 \%$. How much interest did he pay?
16. Mr. Barnes borrowed $\$ 9000$ for 3 years. He will pay $7 \%$ simple interest. How much interest will he pay for the loan?
17. Mr. Carr paid $\$ 64$ interest for a two-year loan at $8 \%$ simple interest How much money did he borrow?
18. Mrs. Johnston borrowed $\$ 600$ at $7 \%$ simple interest. She paid a total of $\$ 84$ in interest. For what period of time was the money borrowed?
19. Matt paid $\$ 90$ interest for a loan of $\$ 750$ for $11 / 2$ years. What was the rate of simple interest?
20. Kate deposited $\$ 400$ in a savings account for 2 years. Interest is to be paid at the rate of $5 \%$ simple interest. What will be the total amount in her account after the two years?

## BUYING MERCHANDISE ON CREDIT

## Determine how much is saved by paying cash.

1. Irwin wants to buy a used car. He can pay $\$ 4995$ cash or put $\$ 500$ down and pay $\$ 135$ per month for 36 months.
2. Len is interested in buying a computer. The store that is selling the type he wants offers him two plans for payment. He can pay $\$ 2475$ cash or can finance for $10 \%$ of the cash price down and $\$ 100$ per month for 24 months.
3. Marlena saw a refrigerator advertised for $\$ 1199$ or $\$ 200$ down and $\$ 55$ per month for 24 months.
4. Irene wants to buy a speedboat. She can pay $\$ 18,500$ cash or finance it for $\$ 3000$ down and $\$ 350$ per month for 48 months.
5. Sabrina is offered two payment plans for purchasing a motorcycle. She can pay $\$ 9500$ cash or pay $20 \%$ of the cash price down and pay $\$ 150$ per month for 5 years.
6. Broom's Furniture Company advertised a 5 -piece living room set for sale. It cost $\$ 2150$ cash or $\$ 500$ down and $\$ 75$ per month for 30 months.

## PERCENT OF CHANGE

Find the percent of increase of decrease. Round to the nearest percent.

1. Original weight, 120 lb .

New weight, 125 lb .
2. Original price, $\$ 12$

New price, \$13
3. Original number, 700

New number, 650
4. Original price, $\$ 299$

New price, \$249

## Solve. Round to the nearest percent.

5. Thumbtacks were packaged in sheets of 120 . Now there are 150 on a sheet. What is the percent of increase?
6. Camp Granada had 75 campers for the first session. Now they have 59 . What is the percent of decrease?
7. The population of a city grew from 75,000 to 100,000 in a ten-year period. Find the percent of increase.
8. Last year Mary spent $\$ 156$ on gifts. This year she increased her gift spending to $\$ 200$. Find the percent of increase.
9. Tom built a doghouse for $\$ 15$. He later sold it for $\$ 21$. What is Tom's percent of profit?
10. The Sunnyside Day Camp enrollment increased from 120 campers to 140 campers. Find the percent of increase.

## CUMULATIVE REVIEW

Change to decimals.

1. $75 \%$
2. $155 \%$
3. $7 \%$
4. $9.37 \%$

## Change to percents.

5. 0.73
6. 4.527
7. 0.0031
8. 9.4

## Change to fractions or mixed numbers.

9. $45 \%$
10. $8 \%$
11. $330 \%$
12. $88 \%$

## Change to percents.

13. $\frac{7}{10}$
14. $\frac{3}{8}$
15. $3 \frac{1}{4}$
16. $\frac{5}{16}$

## Read carefully and solve.

17. Taresa set $48 \%$ of his company's profits aside for investment purposes. If his company profited $\$ 395,000$ last year, how much was set aside for investing?
18. At the movie theater, the $7: 00$ showing sold $75 \%$ of the tickets available. If the theater seats 900 people, how many ticket were sold?
19. Bo spent $\$ 900$ of the $\$ 1200$ jackpot he had won on clothing. What percent of his jackpot did he spend on clothes?
20. The ratio of men and women at the ice cream social was 3 to 5 . What percent of the people attending the social were men?
21. Deidre figures $30 \%$ of her monthly budget goes toward groceries. If she spends $\$ 420$ a month on groceries, how much is her total monthly budget?
22. Simon determined that he had sold 150 neckties so far this year. This is $12.5 \%$ of what he hopes to sell for the year. How many ties does Simon plan on selling this year?
23. A tourist from Vermont won a jackpot worth $\$ 8,500,000$ on a slot machine. The government gets $45 \%$ of his winnings in taxes. How much of his winnings does the tourist pay in taxes?
24. Bikini Hut is putting all its swimsuits on sale during the month of January. A suit that regularly sells for $\$ 42$ costs $\$ 33.60$ in January. What is the discount rate for the suit?
25. Audra makes $8 \%$ commission on her sales. If she sold $\$ 5350$ of merchandise last week, what was her commission?
26. Levin ran up an $\$ 88$ restaurant bill last Saturday. The service was excellent, so he decided to leave a $30 \%$ tip for the waitress. How much was his tip?
27. Eldritch sells golfing equipment and makes $6 \%$ commission on his sales. What was his commission on a $\$ 1350$ sale he made?
28. Moose left a $\$ 7.50$ tip for his waitress on a $\$ 50$ restaurant bill. What percent of his bill did he leave as a tip?
29. Ajax Electronics is offering a $40 \%$ off sale on all speakers. How much can be saved by buying a $\$ 795$ set of speakers during the sale?
30. Reuben purchased a tennis racket that regularly costs $\$ 75.00$. It was on sale for $20 \%$ off. How much did he pay for the tennis racket?
31. How much did Alain pay for a $\$ 836$ television if he got a $35 \%$ discount?
32. Marty bought a barbecue set for $\$ 175.99$ plus $6 \%$ sales tax. What was his total cost?
33. How much would a $\$ 3500$ piano cost if it was on sale for $20 \%$ off with the $6 \%$ sales tax on the sales price?
34. Brenda took out a simple interest loan for $\$ 8000$ at $9 \%$ interest for 4 years. How much interest did she have to pay back?
35. Louise invested $\$ 800$ in a simple interest account at $6.8 \%$ interest. How much interest did she earn after 3 years? How much money does Louise have altogether after 3 years?
36. Roger borrowed $\$ 900$ from his brother Brent. He agreed to pay Brent $5 \%$ simple interest over 18 months. How much interest did Roger pay his brother?
37. Becky saw a sports car advertised for $\$ 25,999$ or $\$ 3000$ down and $\$ 500$ per month for 48 months. How much can she save by paying cash?
38. Cindy earned $\$ 630$ commission by selling $\$ 5250$ worth of merchandise. What percent commission did she earn?
39. Silver's Gym is offering a deal on club memberships. You can pay $\$ 795$ up front for a two-year membership or pay $\$ 250$ down and $\$ 32$ per month for two years. How much would you save by paying up front?
40. Carrie's hometown population went from 8000 people in 1990 to 7500 people in 2000. What was her town's percent of change in population?
1.) Which of the following is closest to 1 ?
A. $\frac{5}{8}$
B. $\frac{9}{10}$
C. $\frac{8}{9}$
D. $98 \%$
E. $\frac{99}{100}$
2.) Which of the following has the largest value?
A. $\frac{1}{3}$
B. $33 \%$
C. 0.35
D. $0 . \overline{33}$
E. $\frac{1}{6}$
3.) What percent of 90 is 9 ?
A. $10 \%$
B. $11 \%$
C. $81 \%$
D. $99 \%$
4.) The average person receives 594 pieces of mail a year. Thirty-five percent of this is junk mail. About how many pieces of junk mail does the average person receive?
A. 630
B. 560
C. 360
D. 210
E. 175
5.) There were 68 students absent from school Monday. This was $4 \%$ of the total enrollment. What is the total enrollment of the school?
A. 1272 students
B. 1700 students
C. 1088 students
D. 2720 students
E. 6528 students
6.) The regular price of a TV set is $\$ 600$. If a $15 \%$ discount is given, what is the sale price?
A. $\$ 90.00$
B. $\$ 510.00$
C. $\$ 540.00$
D. $\$ 585.00$
7.) Ronnie bought a heater fan for his truck. The regular price for the fan was $\$ 18.50$, but it was discounted $20 \%$. What was the sale price of the fan?
A. $\$ 22.20$
B. $\$ 18.50$
C. $\$ 14.80$
D. $\$ 3.70$
8.) After a $30 \%$ discount, Tony paid $\$ 58.80$ for a tape player. What was the price before the discount?
A. $\$ 69.00$
B. $\$ 73.50$
C. $\$ 76.44$
D. $\$ 84.00$
E. $\$ 88.80$
9.) The Fashion King Clothing Company advertised twenty-five percent off all clothing. What would a $\$ 43.20$ jacket cost on sale?
A. $\$ 32.40$
B. $\$ 27.30$
C. $\$ 18.20$
D. $\$ 17.28$
E. $\$ 10.80$
10.) The regular price of a shirt is $\$ 16.00$. It is on sale for $25 \%$ off. What is the sale price?
A. $\$ 4.00$
B. $\$ 11.00$
C. $\$ 12.00$
D. $\$ 16.25$
E. $\$ 20.00$
11.) The mark-up rate for furniture is $80 \%$. What is the price marked on the sofa that the store purchased for $\$ 300$.
A. \$60
B. $\$ 240$
C. $\$ 360$
D. $\$ 380$
E. \$ 540
12.) Kim has a take-home salary of $\$ 1,535.50$ a month. She spends $32 \%$ of her salary on rent and $20 \%$ of her salary on food. How much more doe she pay for rent than food?
A. $\$ 183.90$
B. $\$ 306.50$
C. $\$ 490.40$
D. $\$ 521.05$
13.) At the opening of a movie 765 people attended. The theater was filled to $85 \%$ capacity. What is the theater's capacity?
A. 114
B. 650
C. 680
D. 850
E. 900
14.) About what percent of vehicles get more than 24 miles per gallon of gas?
A. $60 \%$
B. $85 \%$
C. $100 \%$
D. $70 \%$
E. 35\%

| Number <br> of Miles | Frequency |
| :---: | :---: |
| $10-14$ | 2 |
| $15-19$ | 5 |
| $20-24$ | 8 |
| $25-29$ | 10 |
| $30-34$ | 6 |
| $35-39$ | 2 |
| $40-44$ | 3 |

15.) Fred made a wooden planter box for $\$ 8$. He later sold the box for $\$ 10$. Which of the following is Fred's percentage of profit?
A. $2 \%$
B. $8 \%$
C. $10 \%$
D. $20 \%$
E. 25\%
16.) If $\$ 150$ is invested at an annual rate of $5 \%$, how much interest will be earned in one year?
A. $\$ 7.50$
B. $\$ 15.00$
C. $\$ 75.00$
D. None of the above
17.) Which of the following procedures would correctly change 0.38 to a percent?
A. Divide 0.38 by 100
B. Multiply 0.38 by 100 .
C. Subtract 38 from 100
D. Multiply 0.38 by 10
E. Divide 0.38 by 10
18.) What is the procedure to change any decimal number to a percent?
A. Add 100 to the decimal
B. Subtract 100 from the decimal.
C. Multiply the decimal by 100 and affix a percent symbol
D. Divide the decimal by 100 .
E. Drop the decimal and put a percent symbol at the end of the number.
19.) Which process below shows how to present $40 \%$ as a decimal?
A. Multiply 40 by 100
B. Divide 40 by 100
C. Add 40 and 100
D. Multiply 40 by 10
E. Subtract 40 from 100
20.) Which of the following fractions has the same value as 3.14 ?
A. $\frac{3}{14}$
B. $\frac{14}{3}$
C. $\frac{314}{10}$
D. $\frac{100}{314}$
E. $\frac{314}{100}$
21.) When the seniors voted for their class colors, $25 \%$ chose green and tan, $1 / 3$ chose blue and white, while 45 students chose silver and rose. How many students voted in all?
A. 77
B. 103
C. 108
D. 315
22.) The list price for a dress is $\$ 90$. If a discount of $\$ 10.80$ was given for paying cash, what percent of the list price was the discount?
A. $8 \%$
B. $9 \%$
C. $10 \%$
D. $10.8 \%$
E. $12 \%$
23.) Melina purchased a snow board for $\$ 625$. The sales tax she paid was $\$ 50$. What was the sales tax rate?
A. $0.08 \%$
B. $0.125 \%$
C. $5 \%$
D. $8 \%$
E. $12.5 \%$
24.) Max ordered 2 hamburgers at $\$ 1.25$ each. Melinda ordered nachos for $\$ 2.95$. They paid an additional $20 \%$ for tax and tip combined. How much did they spend together?
A. $\$ 6.54$
B. $\$ 5.45$
C. $\$ 4.79$
D. $\$ 4.20$
E. $\$ 1.09$
25.) Paulo's dental insurance has a $\$ 100$ deductible after which the insurance company pays $90 \%$. If his bill is $\$ 1,500$, how much does Paulo need to pay his dentist?
A. $\$ 15$
B. $\$ 100$
C. $\$ 140$
D. $\$ 240$
E. $\$ 1,410$
26.) Jose gets a $5 \%$ commission on his total sales. If this week's total sales were $\$ 1,200.00$, how should Jose figure his commission?
A. Multiply $\$ 1,200$ by 5 .
B. Multiply $\$ 1,200$ by 0.5
C. Multiply $\$ 1,200$ by 0.05
D. Divide $\$ 1,200$ by 5
E. Divide $\$ 1,200$ by 0.5
27.) In the last year, Bob's savings account increased from $\$ 1,000$ to $\$ 1,570$. What percent increase is this?
A. 1,570\%
B. $570 \%$
C. $57 \%$
D. $36.3 \%$
E. $5.7 \%$
28.) Over the summer, Tina swam in 45 swim meets. She won 27 meets. What percent of the swim meets did Tina win?
A. $27 \%$
B. $40 \%$
C. $43 \%$
D. $60 \%$
E. $80 \%$
29.) What is the sale price of an $\$ 80$ jacket after a $40 \%$ discount?
A. $\$ 32.00$
B. $\$ 40.00$
C. $\$ 48.00$
D. $\$ 76.80$
E. $\$ 112.00$
30.) Omar went to a store where he found two sale items. Each item was originally marked at $\$ 60.00$. The first item was on sale for $1 / 3$ off the original price. The second item was on sale for $30 \%$ off the original price. Which statement below is true?
A. The two items will cost the same.
B. The first item will cost the most.
C. The second item will cost the most.
D. There is not enough information to determine which item costs the most.
31.) Any student missing fewer than $10 \%$ of the questions on a math test will earn an "A" on that test. On a test with 25 questions, what is the greatest number of questions a student can miss and still earn an "A"?
A. 2
B. 3
C. 5
D. 22
E. 23
32.) What time, in years, is needed for a principle of $\$ 500$ to earn a simple interest of $\$ 135$, if the interest rate is $9 \%$ per year?
A. 0.3 years
B. 3.3 years
C. 3 years
D. 15 years
E. 30 years

